Docket No.: PH114205.24027KMZR215101.02402 Customer No. 27160 IN THE UNITED STATES PATENT AND TRADEMARK OFFICE In re Application of

Villiam G. KERR

Serial No. 09/955,174

Filed: September 19, 2001

Group Art Unit: 1614

Examiner: Unassigned

CENTER 1600 200

PATENT/OF

For: CONTROL OF NK CELL FUNCTION AND SURVIVAL BY MODULATION OF SHIP ACTIVITY

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents and Trademarks Washington, D. C. 20231

Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

AUTHORIZATION

This Information Disclosure Statement is being filed before receipt of the first Office Action. No fee is required. The Commissioner is hereby authorized to charge any additional fees which may be required for this submission, or credit any overpayment to Deposit Account No. 50-1710.

Respectfully submitted,

KATTEN/MUCHIN-ZAVIS

Gianna Julian Arnold Registration No. 36,358

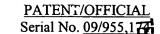
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Docket No.: PH1142C5.24027KMZR215101.02402 Customer No. 27160

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		U.S. F	PATENT DOCUM	MENTS					
EXAMINER'S INITIALS	PATENT NO.	DATE	NAMI	E	CLASS	SUBC	ASS	FILII DAT	
	6,090,621	18 Jul 2000	Kavanaugh et al						
	4,603,112	29 Jul 1986	Paoletti et al.		_				
	4,769,330	6 Sep 1988	Paoletti et al.						
	5,017,487	21 May 1991	Stunnenberg et	al.					
	4,777,127	11 Oct 1988	Suni et al.						
	5,166,057	24 Nov 1992	Palese et al.						
8	* 1		N PATENT DOC		9				
EXAMINER'S INITIALS	PATENT NO.	DATE	COUNT		CLASS	SUBCI	_ASS	Transl Yes	ation No
	WO 97/10252A1	13 Sep 1996	Rohrschneider, L.	R					ļ
_ *	WO 97/12039A2	27 Sep 1996	Krystal, G.						<u> </u>
	WO 89/01973	9 Mar 1989	Panicali, D. et al.						
	GB 2,200,651	14 Sep 1988	Al-Sumidaie, A.M.	K					
-	EP 0,345,242	6 Dec 1989	Jacobs, E. et al.						<u> </u>
	WO 91/02805	7 Mar 1991	Chang, S.M.W. et						
	EP 0 440,219	7 Aug 1991	Billeter, M.A. et al.						<u> </u>
	WO 92/06693	30 Apr 1992	Taylor, J.D.				\longrightarrow		
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			Author, Title, Da			tc.)			
			3-Kinase; "Bioessays						
			<i>nulated synthesis</i> him. BiophysActa; '			1,5)-trispi	rosphal	!e: a	new
		·	d growth factor sti 358, 1992: 157-910	•	esis of Ptdl	ns(3,4,5)	iP3 by	activati	ing a
	Klippel A. et al., "A	lembrane localizati	ion of phosphatidyli	nositol 3-kinas				ltiple si	gnal-
	transducing kinase pathways;" Molecular and Cellular Biology, vol. 16, no. 8, 1996: 4117-27. Helgason, C.D. et al., "Targeted disruption of SHIP leads to hemopoietic perturbations, lung pathology, and a								and a
			vol. 12, no11,-199						
	Huber, M. et al., "The src homology 2-containing inositol phosphatase (SHIP) is the gatekeeper of mast cell degranulation;" Proc. Natl. Acad. Sci. U.S.A., vol. 95, no. 19, 1998: 11330-35.								
	Liu, Q. et al., "SHIP is a negative regulator of growth factor receptor-mediated PKB/Akt activation any myeloid cell-survival;" Genes & Dev., vol. 13, no. 7, 1999: 789-91								
	Liu, Q. et al., "The inositol polyphosphate 5-phosphatase SHIP is a crucial negative regulator of B cell antigen receptor signalling." J. Exp. Med., vol. 188, no. 7, 1998: 1333-42.								
	receptor signalling	.″ J. Exp. Med., vo	i. 188, no. 7, 1998:	1333-42.					



Customer N	PH114205.2402	rial No. 09/955,17
	OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)	
	Jefferson, A.B. et al., "Properties of type II inositol polyphosphate 5-phosphatase;" J. Biol. no. 16, 1995: 9370-77.	Chem. vol. 270,
E 70/21	Wang, C.Y. et al., "pH-sensitive immunoliposomes mediate target-cell-specific delivery an expression of a foreign gene in mouse;" PNAS, vol. 84, 1987: 7851.	Chem. vol. 270, d controlled 4: 51-64.
- 2 MM - 41	Jolly, D., "Viral vector systems for gene therapy," Cancer Gene Therapy, vol. 1, no. 1, 199	4: 51-64.
3 100 0	Evans, D.J. et al., "An engineered poliovirus chimaera elicits broadly reactive HIV-1 neutral Nature, vol.339, 1989: 385-88.	g
TRADEMARIA	Sabin, A.B. et al., "History of Sabin attenuated poliovirus oral live vaccine strains"; J. of Bid vol. 1, 1973: 115-18.	ol. Standardization,
	Fisher-Hoch, S.P. et al., "Protection of rhesus monkeys from fatal Lassa feber by vaccinat vaccinia virus containing the Lassa virus glycoprotein gene;" PNAS, vol. 86, 1989: 317-2	1.
	Moss, B. et al., "Vaccinia virus expression vectors;" Ann. N.Y. Acad. Sci, vol. 569, 1989: 8	
	Flexner, C. et al., "Attenuation and immunogenicity in primates of vaccinia virus recombination human interleukin-2;" Vaccine, vol. 8, 1990: 17-21.	ants expressing
	Mulligan, R.C. et al., "Synthesis of rabbit β-globin in cultured monkey kidney cells following SV40 β-globin recombinant genome;" Nature, vol. 277, 1979: 108-114.	g infection with a
	Luytjes, W. et al., "Amplification, expression, and packaging of a foreign gene by influenza 1989: 1107-13.	virus;" Cell, vol. 59,
	McMichael, A.J. et al., "Cytotoxic T-cell immunity to influenza;" N. Eng. J. Med., vol. 309, n	o. 1, 1983: 13-17.
•	Yap, K.L. et al., "Transfer of specific cytotoxic T lymphocytes protects mice inoculated with Nature, vol. 273, 1978: 238-39.	n influenza virus;"
	Berkner, K.L., "Development of adenovirus vectors for the expression of heterologous genvol. 6, no. 7, 1988: 616-27.	es;" BioTechniques,
	Rosenfeld, M.A. et al., "Adenovirus-mediated transfer of a recombinant α 1-antitrypsin general epithelium in vivo;" Science, vol. 252, 1991: 431-34.	e to the lung
	Kolls, J. et al., "Prolonged and effective blockade of tumor necrosis factor activity through gene transfer," PNAS, vol. 91, 1994: 215-19.	adenovirus-mediated
	Kass-Eisler, A. et al., "Quantitative determination of adenovirus-mediated gene delivery to myocytes in vitro and in vivo;" PNAS, 90, 1993:11498-502.	rat cardiac
	Guzman, R.J. et al., "Efficient and selective adenovirus-mediated gene transfer into vascu Circulation, vol. 88, no. 6, 1993:2838-48.	lar neointima;"
	Guzman, R.J. et al., "Efficient gene transfer into myocardium by direct injection of adenovation Res. vol. 73, no. 6, 1993: 1202-07.	rus vectors;" Cir.
	Zabner, J. et al., "Adenovirus-mediated gene transfer transiently corrects the chloride tran- epithelia of patients with cystic fibrosis;" Cell, vol. 75, 1993: 207-16.	sport defect in nasal
	Li, Q. et al., "Assessment of recombinant adenoviral vectors for hepatic gene therapy," Hu vol. 4, 1993: 403-09.	m. Gene. Ther.,
	Caillaud, C. et al., "Adenoviral vector as a gene delivery system into cultured rat neuronal J. Neurosci., vol. 5, 1993: 1287-91.	and glial cells;" Eur.
	Vincent, N. et al., "Long-term correction of mouse dystrophic degeneration by adenovirus- a minidystrophin gene;" Nat. Genet., vol. 5, 1993: 130-34.	mediated transfer of
	Jaffe, H.A. et al., "Adenovirus-mediated in vivo gene transfer and expression in normal rat Vol. 1, 1992: 372-78.	liver," Nat. Genet.,
	Levrero, M. et al., "Defective and nondefective adenovirus vectors for expressing foreign g vivo;" Gene, vol. 101, 1991: 195-202.	genes in vitro and in
	Samulski, R.J. et al., "Helper-free stocks of recombinant adeno-associated viruses: normal not require viral gene expression;" J. Vir. vol. 63, No. 9, 1989: 3822-3828.	al integration does
	Mendelson, E. et al., "Expression and rescue of a nonselected marker from an integrated vol. 166, 1988: 154-65.	AAV vector," Virol.,

	1 No. <u>09/955,174</u>
	오 요
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)	
Kit, S., "Recombinant-derived modified-live herpesvirus vaccines;" Immunobiology of Proteins Vaccines: Mechanisms, Design, and Applications, Atassi, M.Z., Ed. Plenum Press, New York 219-36.	
Poznansky, M. et al., "Gene transfer into human lymphocytes by a defective human immunoof type 1 vector," J. Virol., vol. 65, no. 1, 1991: 532-36.	deficiency virus
Munroe, S.S. et al., "Subgenomic RNA sequence of human astrovirus supports classification a new family," J. Vir. Vol. 67, no. 6, 1993: 3611-14.	of astroviridae as
Overbaugh, J. et al., "Molecular cloning of a feline leukemia virus that induces fatal immunod in cats;" Science, vol. 239, 1988: 906-10.	
Bender, M.A. et al., "Description and Targeted deletion of 5' hypersensitive site 5 and 6 of the locus control region;" Blood, 92, 1998:4394-403.	e mouse β-globin
Lanier, L.L., "NK cell receptors;" Annual Review of Immunology, vol. 16, 1998: 359-93.	
Yokoyama, W.M., "Natural killer cell receptors;" Current Opinion in Immunology, vol. 10, no. 3	3, 1998: 298-305.
Koh, C. et al., "Augmentation of antitumor effects by NK cell inhibitory receptor blockade in vi Blood, vol. 97, no. 10, 2001: 3132-37.	itro and in vivo;"
Ruggeri, L., "Role of Natural Killer Cell Alloreactivity in HLA-Mismatched Hematopoietic Stem Transplantation;" Blood, vol. 94, no. 1, 1999: 333-39.	n Cell
EXAMINER DATE CONSIDERED	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant. DC: #4122404v1-114205.2402/15101.02402